

DOCUMENT RESUME

ED 263 186

TM 850 677

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 TITLE The Information Processing Consequences of Receiver Apprehension.
 PUB DATE 10 Oct 85
 NOTE 23p.
 PUB TYPE Reports - Research/Technical (143)
 EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
 DESCRIPTORS Analysis of Variance; *Anxiety; Cognitive Ability; *Cognitive Processes; *Cognitive Style; *Encoding (Psychology); Higher Education; Hypothesis Testing; *Language Processing; Learning Processes; *Personality Traits; Role Playing
 IDENTIFIERS T Test

ABSTRACT

This paper discusses receiver apprehension, an information processing syndrome, in the context of counterattitudinal advocacy. Receiver apprehension was conceptualized as a trait anxiety associated with misinterpreting, inadequately processing, and/or being unable to adjust to incoming messages. This processing anxiety suggested cognitive rigidity for high apprehensive receivers and cognitive flexibility for low apprehensive receivers. Counterattitudinal advocacy was employed in this test for cognitive rigidity. Receiver apprehension and information level were hypothesized to interact such that high apprehensive subjects would exhibit more self-persuasion when provided with belief discrepant information and low apprehensive subjects would exhibit significantly more self-persuasion in the no information condition. Results supported this relationship. (Author)

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THE INFORMATION PROCESSING CONSEQUENCES
OF RECEIVER APPREHENSION

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Running head: Receiver Apprehension

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-ABSTRACT-

This paper discusses receiver apprehension, an information processing syndrome, in the context of counterattitudinal advocacy. Receiver apprehension was conceptualized as a trait anxiety associated with misinterpreting, inadequately processing, and/or being unable to adjust to incoming messages. This processing anxiety suggested cognitive rigidity for high apprehensive receivers and cognitive flexibility for low apprehensive receivers. Counterattitudinal advocacy was employed in this test for cognitive rigidity. Receiver apprehension and information level were hypothesized to interact such that high apprehensive Ss would exhibit more self-persuasion when provided with belief discrepant information and low apprehensive Ss would exhibit significantly more self-persuasion in the no information condition. Results supported this relationship.

It has long been observed that subjects encoding a belief-discrepant message tend to adjust their attitudes in the direction of the message. However, the theoretical underpinnings of counterattitudinal advocacy are equivocal. Miller (1973) has summarized empirical support for dissonance, incentive, self-perception, and functional accounts of counterattitudinal advocacy. In addition, evidence has been found for Bem and Funder's (1978) self-presentation (impression management) analysis. Also, Burgoon and his colleagues (Burgoon, 1970; Burgoon & King, 1974; Burgoon & Miller, 1971) have offered a mediational framework involving language intensity. Finally, Berger (1972) has advanced role enactment theory to explain self-persuasion in communication contexts.

Berger (1972) argued for a communication-centered approach and provided a compelling rationale for viewing counterattitudinal advocacy as role enactment. He noted that much of the experimental research had relied upon "intrapersonal" theories of social psychology at the expense of "socially significant" contexts. The shift from intrapersonal models to a theory based on social roles was viewed as moving

counterattitudinal advocacy into the mainstream of inquiry about communication processes.

Typical empirical investigations of counterattitudinal advocacy appear to support Berger's thesis. These studies have required subjects to encode messages "as if" they opposed their previously expressed attitudes. In a real sense, these experiments were social role playing exercises. More importantly, when belief discrepant encoding occurs outside of the laboratory, it frequently involves these same role playing behaviors. The student preparing a speech, for example, often enters the exercise with a moderate (or neutral) attitude, yet argues for an extreme position. Public speaking is clearly an instance of counterattitudinal advocacy, and it has a counterpart in every communication context.

Support for the role enactment approach has centered around the issue of role competency or aptitude (Berger, 1972). The concept has been operationalized as empathy, role skill, or role information. Elms (1966) found that subjects who scored highly on the "Elms Empathic Fantasy Scale" exhibited more self-persuasion following counterattitudinal advocacy. This finding was replicated by Matefy (1972), although other "role aptitude" instruments did not predict attitude change. Berger (1972) used post-performance evaluation as a measurement of role skill and found evidence that skill interacted with role

involvement to generate self-persuasion. Additional support for the competency approach involves role information. The amount of information held on the topic may limit an individual's ability to encode a message. Matefy's (1972) study on role improvisation and Bodakin's (1976) work on role enactment indicated a positive relationship between information level and attitude change.

Berger (1972) noted that theory development in the self-persuasion area has been limited to characteristics of the counterattitudinal message at the expense of research on variables relevant to traits of the participants. Individual differences are of interest for two reasons: (1) most theories of counterattitudinal advocacy are cognitive in nature; thus personality traits may play a key role in the encoding/processing of belief discrepant messages (Bem & Funder, 1978), and (2) theoretical statements concerning self-persuasion have not been particularly successful in isolating the basic processes involved. In fact, the major theories make strikingly similar predictions in most situations. Examining personality traits in the context of the counterattitudinal advocacy paradigm may advance our understanding of the area and facilitate theory construction for self-persuasion processes (Miller and Rokeach, 1968). Such a personality variable has been isolated in the communication literature: receiver apprehension.

Receiver Apprehension

Wheeless (1975) has advanced a personality variable relevant to the field of communication and the counterattitudinal advocacy paradigm. Noting the evidence for reticence (Phillips, 1968) and communication apprehension (McCroskey, 1970), Wheelless reasoned that the individual's communicative role (source or receiver) should function independently in fear arousing contexts. Specifically, he suggested that the fear of sending messages was related to social approval, while the fear of receiving messages was related to processing information (Wheelless, 1975). Termed receiver apprehension, the trait was linked to "....the fear of misinterpreting, inadequately processing, and/or not being able to adjust psychologically to messages sent by others" (p. 263).

The literature on receiver apprehension is far from exhaustive. Wheelless (1975) found that receiver apprehension functioned independently of source-related anxiety. Wheelless and Scott (1976) developed the "Revised Receiver Apprehension Test" (RRAT) and replicated the independence of the construct. Factor analysis revealed a primary vector associated with the fear of not understanding a message. There is evidence that receiver apprehension affects information processing efficiency. In the classroom, Scott and Wheelless (1977) found that receiver apprehension was negatively related to student achievement in tests and projects, with student performance on class projects

producing the major differences. Based on these limited findings, few generalizations can be established about the nature and effects of receiver apprehension. It does appear, however, that "high receiver-apprehensives.... have lower levels of effective information processing than low receiver-apprehensives" (Wheless & Scott, 1976, p. 9).

Beatty and his colleagues have probed the information processing consequences of receiver apprehension. In the context of listening efficiency, Beatty, Behnke and Henderson (1980) found that subject's scoring high on the RAT instrument tended to respond anxiously in situations where incoming information required complex processing or psychological adjustment (p.135). Low processing efficiency suggested that receiver apprehensives might have difficulty assimilating new information. Working from assimilation theory (McReynolds, 1976), Beatty (1981) reasoned that inefficient information processing resulted in a backlog of unassimilated facts. This backlog was viewed as producing a general anxiety which conditioned the individual to the trait of receiver apprehension. In other words, receiver apprehension may be produced as secondary anxiety, and the trait may emerge as general response associated with receiving information. As predicted, Beatty (1981) found a significant correlation between cognitive backlog and receiver apprehension.

In an attempt to understand the creation of cognitive

backlogs, Beatty and Payne (1981) explored receiver apprehension and cognitive complexity. Conceptually, cognitive complexity refers to the use of judgment categories and decision rules when forming impressions and adopting social perspectives. Because complexity levels set an information processing threshold, cognitively simple receivers should experience a backlog of unprocessed information. The authors found a significant negative correlation between cognitive complexity and receiver apprehension. This relationship lends credence to the notion that receiver apprehension is a developmental phenomenon related to information processing efficiency.

Rationale And Hypotheses

Receiver apprehension may offer a logical test of the role enactment account for self-persuasion following counter-attitudinal advocacy. The ability to process information efficiently should be related to role aptitude, and the backlog of unassimilated information should inhibit the effects of belief discrepant encoding. At issue would be the influence of processing messages versus playing a role.

Based upon the counterattitudinal advocacy and receiver apprehension literature, the present study views role-related persuasion occurring as a function of self-deception and self-change. Berger (1972) took this position when he described the effects of counterattitudinal advocacy as "a self-induced

placebo effect." (p.265) In this context, apprehension level and information level should mediate self-persuasion. To the extent that receiver apprehension involves information processing efficiency, high apprehensives should be unable to evaluate and assimilate high levels of role relevant information (Beatty, 1981; Beatty & Payne, 1981). Thus, high apprehensives should exhibit the "self-induced placebo effect" when information is high. When role information is low, apprehensive individuals should be unable to generate arguments against their beliefs and, thus, exhibit little self-persuasion.

Low apprehensives are viewed to be efficient information processors who critically evaluate issues. As a result, these subjects should discount belief-discrepant information and display less change in the high information condition. In the low information condition, however, they may be forced to create their own arguments and consider exceptions to their expressed beliefs. Thus, more self-persuasion would be expected for low apprehensives in the low information situation. The preceeding rationale suggests an interaction between receiver apprehension and information level. Stated formally, it was hypothesized:

H1: Receiver apprehension and level of information will interact such that for low apprehensive subjects significantly more self-persuasion will occur in the low information condition than in the high information condition.

H2: Receiver apprehension and level of information will interact such that for high apprehensive subjects significantly more self-persuasion will occur in the high information condition than in the low information condition.

METHOD

Sample and Procedure

Subjects for the study were 119 students enrolled in the basic communication course at two liberal arts universities in the Pacific Northwest. In the first two weeks of class, subjects completed a pretest booklet containing five potential experimental topics and the Revised Receiver Apprehension Test developed by Wheelless and Scott (1976). Four weeks later, a second packet of potential topics was pretested. After reading each topic, Ss were asked to respond to eight five-step semantic differential scales¹ measuring their attitudes toward the topic (Fishbein and Raven, 1962). Also, Ss completed eight five-step semantic differential scales² designed to measure their involvement on the topic (Preiss, 1976). The experimental message was selected based upon the criteria of (1) highest favorable attitude and (2) highest involvement level. The topic was:

The Environmental Protection Agency should increase its enforcement of pollution laws to protect the food chain from contamination.

Eight weeks after the pretest, Ss participated in the experimental and control group conditions. Each S was randomly assigned to the high information or low information conditions. Test booklets containing the topic and instructions to write an essay opposing the topic were administered. High information encoders ($n=59$) were given a list of issues opposing the topic, and low information ($n=60$) encoders were told to generate a list of opposing issues and then write the message. After completing the task, Ss completed scales measuring their attitudes toward the topic. One intact class completed the pretest and eight weeks later completed the posttest, thus serving as the control group ($n=22$).

Experimental Design

In this study, the independent variables were receiver apprehension (low and high) and information level (low and high). Thus, the research design was a two-by-two matrix with one control group. The dependent variable was change scores following counterattitudinal encoding. Analysis of variance was used to analyze the data. Hypothesized comparisons were probed with t-tests. Statistical significance was set at $p<.05$.

RESULTS

Manipulation Checks

In order to assess the impact of counterattitudinal

encoding, experimental self-persuasion scores were compared to the control group scores using Dunnett's t -tests. The collapsed experimental change score ($\bar{X}=1.67$) was significantly greater (Dunnett's $t=2.90$; $p<.01$) than the control group change score ($\bar{X}=-2.36$). The counterattitudinal advocacy exercise was successful in generating self-persuasion.

Test of the Hypothesis

The first hypothesis predicted an interaction between receiver apprehension and information level encoding such that for low receiver apprehensives, the high information condition would exhibit greater self-persuasion than the low information condition. The hypothesis was confirmed. The test of the hypothesis using analysis of variance revealed a significant interaction between receiver apprehension and information level ($F=4.47$; $df=1$; $p<.05$). The low receiver apprehension, low information condition ($\bar{X}=8.13$, $n=7$) was significantly greater ($t=2.55$) than the low receiver apprehension, high information condition ($\bar{X}=-2.29$, $n=8$).

 Insert Table 1 About Here

Main effects for receiver apprehension and information level were not significant.

Hypothesis two predicted an interaction between receiver apprehension and information level such that for high receiver apprehensives, the high information condition would exhibit greater self-persuasion than the low information condition. Partial support for the hypothesis is claimed. Although the predicted interaction effect emerged, the high information condition ($\bar{X}=2.00$, $n=12$) was not significantly greater ($t=0.88$) than the low information condition ($\bar{X}=-0.46$, $n=13$).

DISCUSSION

This study has important implications in two areas. First, the results strongly support the role enactment approach to counterattitudinal advocacy. Figure 1 illustrates the strength of the observed interaction.

 Insert Figure 1 About Here

Of special interest is the magnitude of the change recorded for low receiver apprehensives. Earlier research suggested that role aptitude was positively related to attitude change (Elms, 1966; Matefy, 1972) and this study links information processing efficiency to the "aptitude" concept. It is reasonable to conclude that information processing skills are integral to a person's ability to assume a role discrepant identity and act in

a manner that is consistent with the new role. Post hoc analysis of posttests scores confirmed the interaction between information level and receiver apprehension.

Insert Figure 2 About Here

Analysis of variance on posttest scores revealed that low apprehensive subjects exhibited less support for the topic when they produced their own counterattitudinal issues.

Insert Table 2 About Here

The findings support Bodaken's (1976) analysis that "(i)f one perceives his role enactment ability to be generally high, he should be more susceptible to self-persuasion." (p. 331) In this case, efficient processors created their own issues and experienced substantial self-persuasion.

The second area of importance relates more directly to the concept of receiver apprehension. Of interest is the finding that high apprehensive subjects demonstrated less attitude change in the low information condition. Although self-persuasion was not significantly lower, the trend was clearly in the hypothesized direction. The only firm conclusion that can be

drawn from hypothesis two is that high levels of receiver apprehension tended to inhibit the amount of attitude change following counterattitudinal advocacy. However, it is possible to attribute this effect to information processing differences. Low processing efficiency, not role enactment ability may account for the effects. These individuals may have been unable to generate the belief-discrepant issues that are required if self-persuasion is to occur. If true, receiver apprehension may be a valuable tool for designing "critical tests" of competing accounts for counterattitudinal encoding. High apprehensives may fit the predictions of dissonance (Festinger, 1957) or incentive (Janis, 1968) theories, while low apprehensives may follow the predictions of role enactment (Berger, 1972) or self-perception (Bem, 1967) theories.

Such a critical test might involve the mediational framework established by Burgoon and his associates. Based on their findings, language variables appear to alter the self-persuasion following counterattitudinal advocacy. High apprehensive individuals should respond to these variables as role players, while low apprehensives should respond as information processors. It would appear that Bem and Funder's (1978) assertion that individual differences can be employed to test the validity of competing theories may be fruitful.

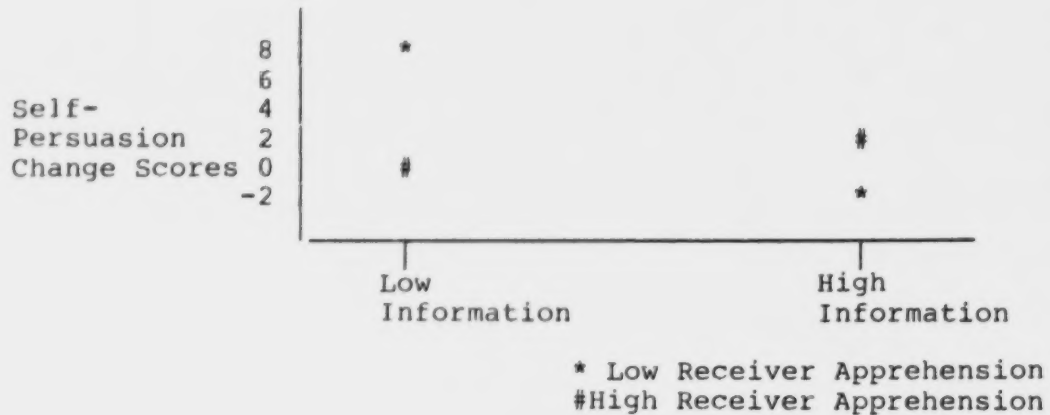
A major limitation of this study involves cell size. While

over one hundred subjects participated, only forty-two could be classified as high or low in receiver apprehension. Moreover, the distribution was skewed in the direction low apprehension. While the percentage is consistent with Wheelless' (1975) findings, the low n suggests that results should be interpreted with caution. This caveat is strengthened in light of the meager state of the receiver apprehension literature. Future investigations should replicate the information component of this study and explore the information processing consequences of receiver apprehension. Also, there is good reason to explore other populations. University students may have lower receiver apprehension levels than the general population.

Finally, it must be noted that the control group change scores were somewhat puzzling. They expressed a more extreme attitude on the posttest than they had on the pretest. This curious development suggests that the experimental test understates the interaction between receiver apprehension and information. Counterattitudinal self-persuasion occurred in the encoding conditions while attitudinal retrenchment was detected in the control group.

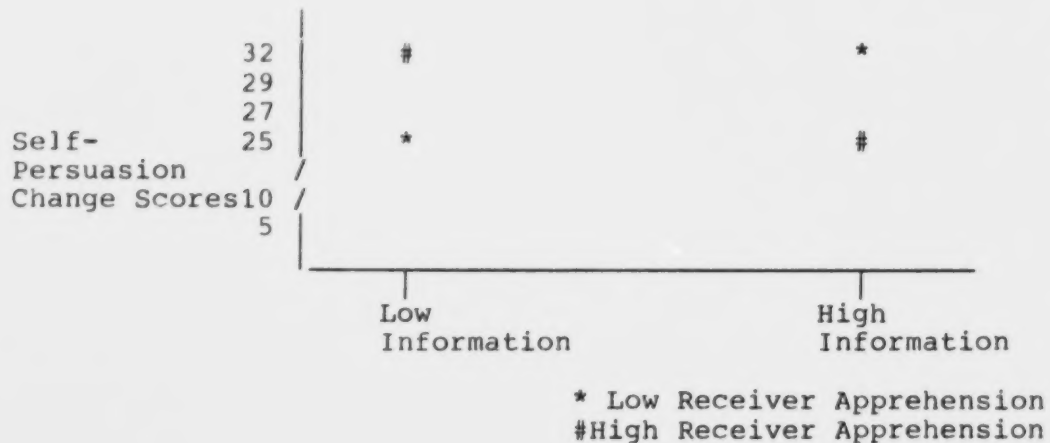
- FIGURE 1 -

Change Scores as a Function of Receiver Apprehension and Information Level Following Counterattitudinal Encoding



- FIGURE 2 -

Post-Test Scores as a Function of Receiver Apprehension and Information Level Following Counterattitudinal Encoding



- TABLE 1 -
Means for Change Scores Following Counterattitudinal
Advocacy: Receiver Apprehension and Low and High Information

High Information	-2.29 n=7	2.00 n=12
Low Information	8.13 n=8	-0.46 n=13
	Low Apprehension	High Apprehension

Analysis of Variance for
Change Scores Following Counterattitudinal Advocacy

SOURCE	DF	SS	MS	F
HIGH/LOW INFORMATION	1	55.40	55.40	1.00
RAT	1	59.30	59.30	1.07
INTERACTION	1	387.04	387.04	6.99*
ERROR	36	1993.54	55.38	

*P<.05

- TABLE 2 -
Means for Post Test Following Counterattitudinal
Advocacy: Receiver Apprehension and Information Level

High Information	32.43 n=7	26.00 n=12
Low Information	26.00 n=8	32.23 n=13
	Low Apprehension	High Apprehension

Analysis of Variance for
Post Test Following Counterattitudinal Advocacy

SOURCE	DF	SS	MS	F
HIGH/LOW INFORMATION	1	10.96	10.96	0.23
RAT	1	1.74	1.74	0.85
INTERACTION	1	190.05	190.05	3.95*
ERROR	9	1395.49	48.12	

*P<.05

FOOTNOTES

1. I agree-I disagree, true-false, impossible-possible, no-yes,
right-wrong, likely-unlikely, incorrect-correct,
probable-improbable

2. close-far, unconnected-connected, involves me-doesn't involve
me, doesn't affect me-affects me, engaging-not engaging,
motivates me-doesn't motivate me, not related to my needs-related
to my needs, doesn't demand personal attention-demands personal
attention

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